BOSTON MEDICAL AND SURGICAL JOURNAL,

Vol. Lxxxix.]

THURSDAY, NOVEMBER 6, 1873.

[No. 19

Original Communications.

LIFE AND DISEASE.

By ALFRED HOSMER, M.D. Harv.

Read before the Massachusetts Medical Society, June 3, 1873.

ALTHOUGH the records of mortality not unfrequently present instances of marked longevity, it is, nevertheless, safe to assert that the majority of deaths do not occur in obedience to the inexorable law of self-limitation, which puts a period to the greatest possible length of human life. The results accruing from a more exact appreciation and a better application of the principles of science, both medical and sanitary, prove that in the past, at least, even if it be not true of the present, although individual existence cannot be indefinitely prolonged, the average duration of life has fallen considerably short of what might have been attained.

On the one hand, then, life implies death, and that in two senses; constantly, in that every organic effort disturbs the vital connections of a certain quantity of tissue material; ultimately, in a mode that needs no description. The time at which death takes place may be accidental—and I wish the word to suggest something besides mechanical violence or active poison; it is often premature, through some one of the numerous forms of disease; it is rarely, if ever, natural from simple senility. I say rarely, if ever, natural, for we have ceased to expect in the structure of the human frame such uniform perfection of all its parts that death shall not be a process involving a series of consecutive changes, but a rapid and simultaneous abolition of all those functions whose integrity is essential to the phenomena of healthy life.

On the other hand, fatal disease, with its diversity of character and location, and its infinity of phases with nominal identity, stands in a very close relation to life, giving that word a broad and com-

prehensive definition.

I believe that every act which an individual performs, though it be as simple as eating, sleeping, or any ordinary form of exercise; every effort which he makes, be it mental or physical, and every variation in the time and manner of performing that act or making that effort, constitutes an influence or agency which modifies his whole subsequent existence. And his relation to health or disease

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at any instant involves no small degree of personal responsibility. and is the product of two factors, of which one is his congenital condition, and the other the combined result of all those influences which have successively affected him. Those influences may be such as he has created or selected for himself, or may originate in agencies beyond his control. Modes of life play a most important part in the determination of the quality or degree of health, and the quality of health underlies the duration of life. Fatal disease is often not simply the termination but the result of life, as parturition is the result as well as the termination of utero-gestation. comparison I use simply for the illustration of an idea, and not for the purpose of furnishing arguments from analogy in support of it. But to give it all possible force I will insist upon two points. Whatever it is that initiates the parturient movement, it is some-thing connected with the process of gestation. There is also something else in that process, acting perhaps at and from the instant of conception, which decides what in loose language we are disposed to regard as the accidents of the fœtus, its sex, weight, proportions, The most limited obstetric experience presentation, position. recognizes the intimate connection between these elements and the character and results of labor.

The broad proposition here laid down may seem bold and untenable to those who claim that the system is intended to resist all impressions of moderate force. But the view that men may live themselves to death, although the expression has a paradoxical sound, is in complete harmony with the simple theory which has not yet been invalidated or superseded by a more acceptable one, the theory which declares that disease forms a part of the plan of creation, and intimates that some provision for its development has been

incorporated into the very nature of man's constitution.

The position assumed stands upon some of the simplest and strongest facts of the human economy. For instance, disease induces atrophy; insufficient use interferes with growth and invigoration; over-use leads to exhaustion. Proper use not only increases strength and enlarges capacity, but is indispensable to all high development, as tension is essential to the manifestation of elasticity in materials which possess that property. Fortunately, what constitutes proper use is not judged by the standard of a geometrical line, but the terms can be applied with no small latitude of meaning. The same numeral does not always represent the specific gravity of the urine in health, and this is true also of the frequency of the pulse. As every voluntary act implies some degree of use, it follows with logical necessity that such act must cause some change in the system, favorable or unfavorable, with reference to its susceptibility to morbific influences, and its reactive power under existing disease. When we consider that the system is in such unstable condition of perpetual change that even the exact weight of the body cannot be a

constant quantity, and that there is such unceasing variation in the balance between constructive agencies and destructive processes that the antagonistic forces which play within and upon the body are in apparent equilibrium only, we realize a state of things which affords the best possible opportunity for the influential action of trivial

agents.

We may seem to invest with undue importance things which are commonly adjudged to be insignificant and of no account. But the law of gravitation assigns a part in the exhibition of force to every atom in the universe, and attributes the same quality alike to invisible particles and gross masses. Repetition, like the longer arm of a lever, can give visible efficacy to the slightest manifestations of power of which the single expressions seem as nothing, and the results of daily observation abundantly illustrate the rule of cumula-The decisive character of the last ounce, the last tive influence. blow, or the finally successful effort, is largely derivative. A single gluttonous indulgence does not suffice to establish a chronic dyspepsia. A single excess will not explain an attack of delirium tremens, and one alcoholic draught will not, with an ordinary predisposition, excite a paroxysm of gout. What I would call an artificial phthisis, in contra-distinction to one that is natural and inevitable, does not come from a brief exposure to those causes which undermine nutrition and determine physical deterioration. It may be remarked that the magnitude of the element of personal accountability, which enters into the matter of the time and mode of decease, converts a considerable portion of mankind into suicides; and so it is. The intrinsic nature of crime has no reference to rapidity of commission. Suicide does not necessarily imply violent or speedily effective measures; but it does properly include every voluntary act of the individual which shortens his life by the space of a single moment. The exigencies of any age may demand the sacrifice of men, and it seems to be ordained that the world's life and progress shall be sustained at the expense of individual wear. But outside and beyond all this, as physicians well know through the testimony of professional experience, large numbers, by honest, earnest and indiscreet exertions, are making themselves irrevocably bankrupt in health and recuperative power, and are hastening dissolution by means less gross and repulsive, but not less effectual than the Japanese section of the abdomen. They die prematurely in the name of some reputable disease which excites no suspicion, and does not suggest to the world the idea of self-destruction. In common phrase, they pay the debt of nature; but it is nature provoked and thwarted by human folly or human misfortune.

Following this train of thought a little further, it is obvious that whatever is suicidal in its effects upon one generation, is, by the law of hereditary descent, homicidal for those who follow. The degeneration and extinction of families, once strong in vigor and num-

bers, are well attested facts. But offspring derives its character through as well as from parents. Witness the occurrences which are catalogued as instances of atavism. Congenital condition, which really is so important a part of one's stock in life and health, is not simple, but extremely complex in the elements of its composition; and, in its production, looks back to manifold influences, which, appearing at various ancestral points, move, with inevitable and innumerable modifications, along converging lines of transmission, and by their final union in each individual combine to form what we design

nate by the comprehensive term constitution.

There are competent persons who hold the opinion that, with all due allowance for numerical growth of population, there is an increase of insanity and of other disorders of the nervous system, This greater prevalence of these affections may, I think, be traced to the circumstances under which procreation takes place, and may be adduced as an instructive example of the influence which modes of parental life exert upon offspring. Active brains do not necessarily render an age thoroughly and truly intellectual, but they surely make it a busy one. In our own day, the wider and still expanding scope of general information, the elevated standard of education and the methods of attaining to it, the sub-division and multiplication of details in all scientific studies, the anxieties and competitions of business, the ambitions of political life, all tend to beget a permanent state of mental tension and nervous excitement, such as formerly were only known in times which seriously disturbed the public tranquillity. Out of this condition of over-exertion and partial exhaustion children are born, with antecedents and prospects which no thinking man would select as favorable to the stability and durability of the nervous system. If daughters are often disparaged by the comparison which is made between their infirmities and the overwhelming energy of their mothers, it may be that the former are only bearing a burden of debt increased by an extravagant expenditure of force on the maternal part.

The question of the definite, specific causation of disease has long attracted an earnest attention from both scientific and popular sources. By the extent of its discussions, every text-book confesses the interest attaching to the subject, and rarely a patient who fails to demand the reason of his illness. Curiosity constantly propounds a problem for which philosophy is unable to furnish an exact, com-

plete and satisfactory solution.

In answer to a question which inexperience only would ask, the late Dr. James Jackson replied, "I should be glad to know all the causes of disease, but during a long and diligent life I have looked for them in vain." We may acquire some positive information concerning the immediate associations and connections of disease, but many of its causes stand in such intimate relation with the habitual and exceptional acts of daily life in more than a single generation,

that these causes escape detection by all available means of analysis. The thoughtless deed of some remote progenitor may participate in the origination of the malady which terminates fatally to-day.

The customs of society, often found in effective opposition to the interests of good health, are but the aggregate of the habits of its members. And if these customs sometimes engender disease, the sufferer is only exposed to the reversion of his own improprieties, and is forced to accept consequences in the responsibility for which

he has his just share.

The common notions of disease convey to the mind the idea of what endangers or destroys life. But as this impression is not capable of universal application, I wish to invert my subject, and making disease the first term in the series, recall a few facts which show that it may sometimes perform a salutary and protective office. And, in this connection, two or three brief suggestions will suffice. Certain contagious diseases, almost universal in their visitations, capable of running a thorough and complete course, without apparent detriment, afford a protection which is absolute for the majority of those whom they attack. Oftentimes, a safe disease may anticipate and prevent one that is probably or surely destructive of life. This conservative morbid process may be of artificial origin, as from the introduction of vaccine virus, or may arise spontaneously, as in those cases where an adhesive inflammation of limited extent saves one from a general and dangerous peritonitis.

With obvious limitations, disease comes as a benefaction to those who, with some mistaken ideas of necessity or propriety, defy natural law and ignore the relations which have been established between the intensity and duration of effort and the subsequent repose which the expressions of that law require. An illness of a severity just sufficient to produce complete disability and to secure unreserved surrender to the condition and course of disease, may, by the state of inaction and rest thus imposed, bring a long-needed adjustment to any man who has assumed, or had thrust upon him, burdens in excess of his strength. There is a popular impression, vaguely conceived but with some small foundation, that disease may be wholesome and conducive to health; and many a patient has found himself, at the completion of his convalescence, not simply restored to the point at which the disease made its invasion, but literally re-

freshed and renewed.

No elaborate machine is complete unless it is provided with some self-acting apparatus which shall take cognizance of anything which threatens the perfection of its product, or the safety of some of its parts. Many people are not superior to inanimate objects in the intelligence and discretion which they exhibit with reference to the care of themselves. For them, it is a piece of enviable good fortune when disease comes to their rescue, as a regulating and restraining agent, like the automatic contrivance in mechanics, and saves

them from transgressions of which the results may be without remedy. Such good fortune is the portion of but few; for the average human system is rich in self-protective power, and the determination with which it instinctively seeks to maintain its integrity to the last is strikingly shown in two instances. The appearance of unusual health which frequently precedes a seizure, seems to be the final effort which the system makes, under the stimulus of some premonition, to resist the approach of disease. In close analogy with this, is the improvement often noticed in symptoms just before death; a delusive change, which is simply the evidence of one last attempt to rally before yielding in a hopeless struggle.

A CASE OF POISONING BY FIVE GRAINS OF STRYCHNINE TREATED BY CHLOROFORM INHALATIONS. RECOVERY.

By G. W. COPELAND, M.D.

As the following case may be of some interest, I will submit it to

the profession.

Mr. B., shop-keeper, a middle-aged man of temperate habits, while suffering from depression of spirits, obtained, on Sept. 1st, ten grains of strychnine, representing his intentions were to poison a dog. He secured a room at a hotel, took a dose of laudanum as a preparatory step, and went to bed, intending to swallow the drug as soon as the effects of the opiate were apparent. It appears he fell asleep, and did not awake till half past four in the morning, when he took half the quantity previously mentioned. Some time after, he was seized with convulsions. The occupants of the adjoining rooms, awakened and alarmed by his screams, at length came to his relief. I was called and saw him at 6, A.M. I found him lying in bed; legs and arms extended, his hands firmly clenching the sides of the mattress; intellect clear. He confessed he had taken strychnine. The clothing, by his request, had all been removed, as the slightest touch produced a spasm. I administered twenty grains of sulphate of zinc as soon as it could be obtained. This he swallowed with great difficulty, the contact of the solution with his mouth producing trismus and constriction of the throat. The paroxysms came on every three or four minutes. He was conscious of their approach, and entreated us to hold him, to raise him up, or lift him out of bed, till his body became fixed, his head drawn back and articulation impossible. In this condition of complete opisthotonos, he remained for about a minute, his face livid, and death apparently inevitable. I now resorted to chloroform inhalations, with the happy result of preventing each paroxysm from lasting over a few seconds, or subduing it before the muscles of the back became rigid. So soon as he felt one coming on, I applied the vapor to his mouth;

when the muscles were completely relaxed and the breathing natural, I removed it. The convulsions returned regularly till 2, P.M.: the intervals then grew longer till 5, when the paroxysms entirely subsided. For some time after he regained the use of his hands and arms, the legs could not be touched without producing a shock, as if the poles of a battery had been applied. In the eleven hours, he had used over a pound of chloroform. During the night and next day. I found it necessary to relieve the bladder with the catheter. The following evening-thirty-six hours after I first saw himhe was taken home in his carriage, and a week subsequently he walked to my office, although still suffering from soreness and stiffness of the muscles.

In this case, the sulphate of zinc did not produce emesis, nor did I repeat the dose, feeling confident the drug must already have been absorbed. And here I would state that the treatment given in all the books, viz., "give emetics, and persist in their use till free emesis is produced," should at least be modified. If we do not see the patient till a quarter of an hour after the poison is taken, or if convalsions have set in, emesis will surely do much harm. In a case 1 saw in Philadelphia in 1868, the patient was nauseated with doses of sulphate of zinc and ipecac. Each attempt at emesis produced the most alarming convulsions. With chloroform to ward off the convulsions till the poison is eliminated from the system, deaths from strychnine will be very rare.

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Oxide of Zinc as a Remedy for the Diarrhea of Infancy and Child-HOOD.—Dr. Brakenridge has carefully tried various methods of treatment in many hundreds of cases of diarrhosa of infancy and childhood, at the dispensary of the Edinburgh Royal Hospital for sick children.
The above remedy he has been led to adopt for the following reasons: First, the disease depends chiefly upon a weak and too impressionable state of the nerve centres presiding over alimentary secretion; secondly, it is correlated to convulsions and other spasmodic diseases; thirdly, it is accompanied by hyperæmia of the secreting surfaces of the alimentary canal. To meet these indications, we must have a remedy which is, firstly, tonic; secondly, anti-spasmodic; thirdly, astringent. In the oxide of zinc we have these three properties combined. First: as a tonic, it has been said to be to the nervous system what iron is to the blood. Its usefulness in the analogous condition of profuse sweating is well known. Secondly: as an antispasmodic, it is deservedly held in high estimation, and has been found to effect, frequently, a cure in convulsions and other spasmodic diseases. It may, therefore, be depended upon to prevent the occurrence of those nervous diseases which stand correlated to diarrhea, as the alternative results of such irritations as dentition, worms, &c., and which may supervene on the rude stoppage of diarrhœa by astringents. Thirdly: its astringent properties are well known.-Medical Times and Gazette.

Progress in Medicine.

REPORT ON OPHTHALMOLOGY.

By O. F. WADSWORH, M.D. Harv.

ANATOMY.

1. UEBER die Nerven der Hornhaut. HOYER. Archiv f. mikros. Bd. ix. Hft. 2.

2. Sulla terminazione dei nervi nella cornea. DURANTE.

Centralbl. f. d. med. Wissensch., No. 27, 1873.

3. Ueber Mehrschichtige Epithelien. LAUGERHANS. Virchow's Archiv, Bd. lviii. Hft. 1.

4. Untersuchungen ueber die Drusen der Bindehaut des Auges.
Wolffeine. Centralbl. f. d. med. Wissensch., No. 54, 1872.

5. Zur Frage ueber die Iris Musculatur. Gruenhagen. Archiv f. mikros. Anatomie, Bd. ix. Hft. 2.

6. Die Musculatur der menschlichen Iris. MERKEL, Gratulations-

schrift. 1. Hoyer describes, separately, the distribution and termination of the nerves of the cornea in the four classes of vertebrates, and adds a valuable critical review of the literature of the subject. Like other recent observers, he found chloride of gold the most valuable reagent for his purpose. There is only space in this report for a brief account of the corneal nerves in man. Branches of the ciliary nerves enter the sclera near the corneal edge, and form within it a meshwork which surrounds the cornea. From this meshwork, some sixty separate nerve bundles, each containing from one to twelve or more medullary fibres, enter the cornea, the larger bundles nearer its posterior, the smaller nearer its anterior surface. Soon losing their medullary sheaths, the nerves form numerous plexuses in the corneal substance, and, finally, a meshwork with small interstices in the most anterior layers, some meshes immediately beneath Bowman's membrane, others somewhat deeper, some consisting of finer, others of coarser fibres. The splitting up of the axis cylinders into minute fibres and the manner of formation of plexuses are carefully detailed. Nowhere, Hoyer considers, do true anastomoses occur. The nuclei which are present in some of the larger branches and at the intersection or division, are not ganglion-cells, but belong to the neuroglia. From the superficial network above described, numerous small branches penetrate Bowman's membrane, and spread out, tassel-like, to form a close network of fine fibrils on the surface of the membrane, in immediate contact with the lowest epithelial cells (sub-epithelial layer). Toward the centre of the cornea, this meshwork is closer, closest a little to the nasal side. In Bowman's membrane, no nerves exist, except the perforating branches. Between the epithelial cells, and especially be-tween the flattened cells of the superficial layers, the sub-epithelial meshwork is continued and numerous free terminations of the fibres occur, particularly among the flattened cells, and appear to reach to their free surface. Similar free ending of the nerve fibrils is described in the substance of the cornea; tolerably frequent in the anterior layers, seldom in the middle, and in the posterior only exceptionally present. The greater portion of these fibres which end free, Hoyer regards as belonging to a characteristic meshwork lying just beneath Bowman's membrane, the fibres of which contain no nuclei, and which is closest nearest the periphery, more scanty toward the centre of the cornea. Connection of the nerve fibres with the corneal corpuscles (see JOURNAL, Nov. 7, 1872), or terminal enlargements at the free epithelial surface (Cohnheim), Hoyer was unable to discover.

2. Durante describes, in the frog's cornea, besides the nerve plexus in the deeper layers, an exceedingly fine meshwork in the anterior layers, its meshes regularly rectangular, which he regards as due to a true anastomosis of primitive nerve fibres. The fibres which perforate the anterior layer of the cornea to reach the epithelium, he states, pass directly through the lower cylindrical layer of cells, and wind through the other layers to the layer next to the outer, where they form a meshwork of fibrils, with irregular and narrow meshes. In the rabbit and dog, the same terminal network exists, with slight modifications. Durante has never observed ganglion-cells within the peripheral portion of the corneal nerves; the not infrequent nuclei he, as Hoyer, believes are of connective tissue.

3. Laugerhans finds that the apparently homogeneous border at the base of the innermost layer of cells of the cornea is caused, as Henle has stated, by the interlocking of fine serrations at the base of the cells, with similar projections from the corneal tissue. Similar serrations occur on the upper surface of this layer, and on both upper and under surfaces of the other layers, excepting the upper surface of the outer layer. The serrations are of various degrees of fineness in different animals, in man very fine. The cells of the different layers take on a great variety of shapes from their mutual pressure, the lower surfaces in general being concave and receiving the summits of the cells of the layers beneath; the upper, convex. Often from the lower edges of the cells, digitations press downward between the lower cells, and especially is this the case with the second layer, the digitation of its cells often reaching to the cornea itself. In the conjunctiva of the lids, the

est layer with the connective tissue below is less close.

4. Wolfring has discovered, in the upper part of the tarsus of the upper lid, toward the nasal side, a number of acinose glands. These glands lie not only in the triangular space between the blind ends of the Meibomian glands and the orbital edge of the tarsus, but also occasionally are present between the lobes of the latter. They open by common ducts at or near the orbital edge of the tarsus, and resemble the glands of Krause in the conjunctival fold in everything except their situation, while in the deeper inflammations of the tarsal conjunctival.

appearance of the cells is quite similar, but the connection of the low-

they undergo the same pathological changes as Krause's glands.

The glands described by Wolfring correspond in position to glands which Klein had previously given an account of in Stricker's handbook. Klein, however, regarded them as tubular, not acinose.

5. Gruenhagen has, in previously published papers, taken decided ground against the existence of a dilatator muscle of the iris. The present paper consists mainly of a criticism of the views of those observers who have described such a muscle, and it does not appear that he has pursued any fresh investigations to support his side of the ar-

gument. Strangely enough, he seems to place considerable weight on the assumed fact that, on physiological grounds, there is no need of a dilatator, while other writers, even though admitting the insufficience of anatomical proof of its presence, have argued that, unless such a muscle does exist, it is at least extremely difficult to offer a satisfactory explanation of some movements of the iris. He points out the differences which exist in the various descriptions which have been given of this muscle, and divides its supporters into two classes: those who believe it to consist of bundles of fibres curving from the sphincter to take a radial course, and those who regard the layer first described by Bruch, lying between the stroma of the iris and its posterior epithelium, as muscular. The radial bundles of fibres curving from the sphincter he admits, but not that they extend so far toward the periphery as some have stated; they act, he believes, in assisting the contractions of the sphincter, as drawing on the crossed ends of a necktie makes it tighter. Bruch's layer he asserts to consist of elastic tissue. He admits that, in some birds, beneath the posterior pigment layer of the iris, there exists a layer of spindle-formed cells, on the side of which an elliptical nucleus is situated, and which often taper to fine processes at the two ends; these, however, he regards as a second layer of epi-

6. Merkel, as the result of recent investigations, describes a continuous layer of muscular fibres situated immediately behind the stroma of the iris, and having a direction radiating from the pupil. The thickness of the layer was only from one and a half to two times that of the thickest portion of an individual fibre. Near the pupil, the more anterior fibres curve round to join the sphincter; the more posterior end without changing their course. The muscle does not quite reach to the ciliary insertion of the iris, but near the ciliary body its fibres curve so that they here form a circular layer. In the greater portion of the layer, the fibres follow a straight course. These statements agree very nearly with the results obtained by Jeropheef, given in brief in Stricker's Handbook. Both nuclei and fibres were rendered readily distinguishable by staining with hæmatoxylin.

PHYSIOLOGY.

1. Der Uebergang einiger Substanzen aus dem Conjunctivalsack in das Wasser der vorderen Augenkammer. Lillenfeld. Monatsbl. f. Augenheilk. Beilageheft, 1873.

2. Zur Identitäts Frage. Schoeler. Archiv f. Ophthalmologie, Bd. xix. Abth. 1.

3. Stereoskopie bei unvollkommenen Sehvermögen. Van der Meu-

Archiv f. Ophthalmologie, Bd. xix. Abth. 1 4. Ueber die Accommodationsbewegung der Chorioidea im Auge des Menschen, des Affen und der Katze. Hensen und Voelckers. Archiv f. Ophthalmologie, Bd. xix. Abth. 1.

5. Ueber Scheinbare Accommodation bei Aphakie. Donders. Ar-

chiv f. Ophthalmologie, Bd. xix. Abth. 1.
6. Accommodations-Vermögen bei Aphakie. Mannhardt. Inaugural-Dissertation. Kiel, 1873.

7. Die Stokes'sche Linse mit constanter Axe. Snellen. Archiv f. Ophthalmologie, Bd. xix. Hft. 1.

8. Eine Methode zur Bestimmung der Refractions-Anomalien. Pr-ROES. Archiv f. Ophthalmologie, Bd. xix. Abth. 1.

1. Lilienfeld undertook a series of experiments to determine whether substances dropped into the conjunctival sac generally pass into the intra-ocular fluids. Most of the substances employed were found to be present in the aqueous humor; with few exceptions, these were such as excited more or less inflammation of conjunctiva, cornea and iris, and this fact Lilienfeld believes is of importance as favoring the passage of materials from the conjunctiva into the aqueous. He thinks endosmosis through the cornea is at least not the only way of explaining the matter; but that it is equally possible that substances may be absorbed into the largest vessels of the conjunctiva, pass through the anterior ciliary arteries into the vessels of the iris and ciliary body, and thence be excreted with the aqueous into the anterior chamber.

2. Schoeler's paper is of decided scientific value. In the limits of this report, however, it can only be stated that his investigations, among other results, appear to overthrow entirely the theory of identity of corresponding points of the retinas, and to show that the mechanism of associated movements of the eyes, as well as of those attending ac-

commodation, is not, in the new-born, pre-established.

3. Van der Meulen deduces, from experiments made in Donders's laboratory, the fact of practical importance that, if one eye be normal, vision of even $\frac{1}{50}$ in the other eye may be of considerable assistance in

determining the distance of large objects.

4. Hensen and Völckers, in a monograph on the mechanism of the accommodation, published in 1868, stated that they had been able to demonstrate, in the eye of the dog, a movement of the choroid forward when accommodation for the near occurred. The eye having been laid bare, and needles passed through the equatorial portion of the sclera and choroid, the ciliary nerves were irritated, and, as the pupil contracted and the lens became more convex, the free external ends of the needles underwent a decided movement backward. By making an opening in the sclera, they were able also to see the choroid advance. The theory that a similar movement took place in the human eye has never, however, obtained any general acceptance. Others had, indeed, confirmed their observations on the dog, but Adamuk, experimenting on cats, found but little movement of the choroid, and argued from this and anatomical consideration of human eyes, that such a movement could only take place in eyes in which the ciliary muscle contained no circular fibres, and in which the outer attachment of the zonula of Zinn is situated more posteriorly. The same observers now give the result of investigations on the eyes of man, the ape and the cat. The two latter were curarized, the eyes laid bare, and needles inserted through the sclera. The results of electrical stimulus showed, as in former experiments on the dog, evident movement of the choroid. The difficulty of obtaining freshly enucleated human eyes in which the choroid and ciliary muscle might be supposed relatively normal, limited the number of their experiments in this direction to four. Three of these eyes gave negative, or nearly negative results; all of them, however, were under the influence of atropine, and in all subsequent dissection showed a high degree of degeneration of the ciliary muscle. The fourth eye, the ciliary muscle and choroid of which were in good condition, gave results which corresponded entirely with those obtained on other animals. Needles, inserted in the equatorial region, showed exact and evident movement of their free extremities backward; a needle inserted in the ciliary body did not move, and one inserted close to the macula lutea, as had also been the case with the ape, remained stationary. The experiments appear to be convincing, and their importance, as explaining the mechanism of the changes which take place

in myopia, is not inconsiderable.

5. Donders takes up again the question of accommodation in aphakial eyes, which, previously regarded as positively settled, was re-opened by Förster, in the *Monatsbl. f. Augenheill.*, Feb. and March, 1872 (see JOURNAL, Nov. 7, 1872). He points out the numerous inaccuracies and fallacies in Förster's argument, and shows, by the results of a series of crucial experiments carried out by one of his pupils, the details of several of which are given, that absolutely no accommodation occurs in aphakia. With regard to the supposition of Woinow, from observations on aphakial eyes, that the cause of astigmatism, as well as variations in its degree, &c., may depend on the form of the sclera, the impossibility of such a connection of cause and effect and the ease with which an error of observation might be made are referred to. Much the same supposition as that of Woinow was brought forward at the meeting of the American Ophthalmological Society, in 1872, and was then well answered by Dr. Hay.

6. Mannhardt, from independent observations, comes to the same

conclusions as Donders.

7. Stokes combined a positive and negative cylinder glass so as to produce at will a cylindrical glass of varying focus. One great objection to the use of this glass in practice was the fact that the direction of the cylindrical axes changed with every change in the strength. Snellen describes a modification of the lens, by which the important advantage is gained that the axes are maintained constant. disadvantage exists that, in the determination of astigmatism by its means, the refraction of only one meridian can be determined at a time. The employment of two positive cylinders, instead of a positive and a negative, removes one element of difficulty, but introduces another, since with the latter combination a certain varying spherical effect is obtained as the cylindrical effect varies. Snellen proposes to obviate the latter difficulty by combining with the Stokes lens two spherical glasses (a positive and a negative), arranged on the principle of the Gallilean telescope, and, by changing the distance between them as the cylindrical lenses are rotated, to neutralize the spherical refraction. The technical difficulties in the way, he believes can be satisfactorily overcome. On the same principle, that of the Gallilean telescope, he proposes to construct double spectacles, with which different degrees of spherical ametropia may be determined.

8. Puroes describes the method he has employed for testing degrees of ametropia with the modified Stokes's lens. From the account given, it would appear to be much less convenient than the methods usu-

ally employed for this purpose, even if it be as accurate.

[To be concluded.]

In the Introductory Address at Queen's College, Birmingham, on "Public Health," Mr. Clay, the orator, stated that the Court Rolls of Stratford-on-Avon showed that Shakspeare's father had been fined, in 1552, for depositionally in the contract of the cont ing filth in the public street, and again, six years later, for not keeping his gutter clean.

Bibliographical Dotices.

Clinical Reports from Private Practice. By John Herbert Clairorne, A.M., M.D., one of the Vice Presidents of the Medical Society of Virginia; lately Surgeon in the Provisional Army of the Confederate States; and Executive Officer in charge of General Military Hospitals at Petersburg, Virginia. Petersburg, Va.: Jos. Van Holt Nash, Publisher. 1873. 8vo. Pp. 424.

This book is a collection of cases occurring in the private practice of a physician during a period of twenty years, with commentaries on certain subjects suggested by them. The cases are briefly but clearly reported, and chiefly intended to illustrate the subjects of the treatment of the diseases most frequently coming under the cognizance of the general practitioner, surgical cases being excluded. The author states that his patients are mostly composed of well-to-do people, who have lived under good hygienic conditions, and who were generally free from depressing influences. Such people, he says, bear mercury, depletion, and the antiphlogistic regimen better than that class whose cases ordinarily make up the reports of hospitals, infirmaries, college clinics and other public charities. We accordingly find a more active treatment recommended in certain cases than is customary in this latitude; and especially we have noticed that calomel is prescribed to nearly every patient in some stage of his disease; but, with this ex-ception, we do not see that Dr. Claiborne's treatment differs materially from that which intelligent practitioners in all parts of the civilized world have adopted as the best. We have been much pleased with the perusal of the volume, and can conscientiously recommend it as worthy of the attention of the profession, and especially useful to those who have much occasion to treat malarial diseases. We can only briefly allude to a few of the subjects discussed by Dr. Claiborne, and to his opinions upon them.

In the treatment of Dysmenorrhæa, the author places more reliance on constitutional treatment, and on internal remedies, than on incision of the cervix uteri, believing that the latter proceeding, though sometimes demanded by a constricted condition of the canal, or internal os, is, in the majority of cases, useless. He protests against that indiscriminate use of the knife which is enjoined by some eminent gynæcologists. "In every case of dysmenorrhæa which presents itself, and especially in the case of every unmarried woman, a rational medical treatment should be tried before resorting to the use of instruments." In the neuralgic form of the disease, he advises quinine, cold baths, &c., to build up the general health, and, during the paroxysm, opiates, hot fomentations, aconite and anodyne suppositories. In active congestive dysmenorrhea, he recommends the bichloride of mercury, in small doses, in the intervals, and, during the paroxysm, general or local depletion, hot baths, Dover's powder, camphor, &c. In the passive form, he employs iodide of iron; in rheumatic dysmenorrhœa, purging with colchicum and magnesia before the paroxysm, and Dover's powder when the pain comes on. He speaks of cypripedin as an empirical remedy of some value in this disease. In

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all cases, he considers it very important to maintain a healthy action of the "cutaneous glands," and recommends a judicious system of

baths, with flannel worn next the skin, summer and winter.

The author's remarks concerning the treatment of Rheumatism are interesting, in view of the great diversity of opinion on that subject. He is not by any means disposed to leave his patients to Nature alone; at the same time he is moderate in the administration of medicine. "Mercurials in the commencement of the disease," he says, "colchicum and alkalis, especially the phosphate of ammonia, when the symptoms become sub-acute, the iodide of potash when the patient is pale, feeble and spiritless, constitute the routine of treatment with me." Mercury is used "to correct the intestinal secretions," not for the sake of its constitutional effect. Opiates he gives only to the extent of alleviating pain and procuring rest for the patient. Quinine is required in cases complicated with malarial poison.

The subject of the treatment of *Pneumonia* is fully discussed, but without any satisfactory results. Dr. Claiborne justly observes that "climatic changes, endemic influences, constitutional peculiarities, age, season, prior or repeated attacks, present condition of patient, all combine to influence the treatment, and especially to render a description of general treatment difficult and unsatisfactory." He does not seem to be aware that the great majority of cases of uncomplicated pneumonia will recover quickly and perfectly without any

treatment whatever.

Under the term Cholera Infantum, Dr. Claiborne includes all cases of diarrhœa in children during the period of the first dentition, as well as those characterized by frequent, profuse, serous discharges, with vomiting and collapse. It is not surprising, therefore, that he does not consider the disease as peculiarly frequent in this country. We think, on the contrary, there can be no doubt that the genuine disease is comparatively rare in Europe. He still adheres to the old notion that the liver is always affected in this disease, with the result of first "perverting, then suppressing the normal secretion." In the treatment, calomel is with him "the main reliance and the rarely-failing resource." One-fourth of a grain is given every hour, in finely-powdered ice, until the vomiting and purging are checked, or the passages assume a thick, greenish character. Brandy is also given if there be much prostration; counter-irritation is applied to the stomach, and breast milk, if practicable, if not, milk and water, in teaspoonful doses, ice-cold, every half-hour, or oftener. Opiates or astringents are subsequently given, according to circumstances. We commend the author's remarks on the use of opium in the treatment of children, to every young practitioner; he points out very clearly the danger of the incautious use of this drug. The whole article on the treatment of this dangerous disease is extremely interesting, and may be read with profit by every physician who has the charge of young children.

Diphtheria is the subject of a highly instructive chapter, in which the author treats of its contagion, its diagnosis, its treatment, and the question of its identity, or the reverse, with croup. He believes in the duality of the two diseases, founding his opinion on the supposed "sthenic" character of croup, and the toxicohemic character of

"Croup commences in the larynx, and, though it may extend downwards, never extends upwards. Diphtheria commences in the fauces, and though it may extend downwards, yet it very often extends upwards. The first symptoms of the latter occur in the parts subservient to deglutition, the first symptoms of the former in the respiratory tract. One is always idiopathic, the other secondary; one is affected by temperature and season, and is never epidemic or infectious; the other is capable of widespread epidemic influence at any season, and is sometimes infectious. Both are diseases peculiar to childhood; but diphtheria is often seen in the adult, croup rarely. In the latter disease, no unpleasant sequelæ ever follow recovery-such as paralysis, loss of vision, &c. In the former, such sequelæ often ensue. In one, the antiphlogistic treatment is generally indicated; in the other, it is productive of harm, unless used with great discretion. In the one, the prognosis is generally favorable, except in certain epidemics; in the other, it is exceedingly grave. The duration of one is rarely beyond ten days; the other often continues twenty. Convalescence from the one, prompt and speedy; from the other, tedious and uncertain." (Nothing is said about albuminuria.)

It may be remarked that these distinctive indications prove nothing. The two diseases may be really different, but the fact that an exudative affection of the throat is in one case followed, for instance, by paralysis, and in another not, does not prove it. We have seen a case in which well-marked diphtheritic paralysis of the limbs followed what was called by an eminent physician membranous croup. To say that true croup is never followed by paralysis is begging the question; we must first settle what true croup is, and then see if it be ever followed.

lowed by paralysis.

Dr. Claiborne's remarks on the subject of the treatment of diphtheria are extremely sensible. He believes that it has often been treated too much. We are glad that he repudiates all caustic local applications, as only adding to the sufferings of the patient, without being of any benefit. He relies on a tonic, sustaining and stimulating treatment, with simple astringent or antiseptic gargles under certain circumstances. In one case, that of a girl, 11 years old, in which suffocation was imminent, he performed tracheotomy. The immediate effect of the operation was complete relief; but in less than twenty-four hourses illustrated the state of the operation was complete relief; but in less than twenty-

four hours capillary bronchitis set in, and the patient died.

Under the title of *Periodic Fever*, the author discusses an affection frequently confounded with typhoid fever, which it resembles in some of its features, but which is a wholly distinct disease, of malarial origin, and curable by quinine. It is distinguished from intermittent fever by the mildness and irregularity of its paroxysms; and from the ordinary bilious remittent by the absence of severe constitutional symptoms attendant on its inception, and of any special bilious disorder. The disease is rarely fatal. Its duration, under appropriate treatment, is about six days, but it may last much longer if mistaken for typhoid and treated accordingly. Dr. Claiborne gives a dose of calomel and Dover's powder in the beginning; leeches either to the head or on the bowels, followed by fifteen or twenty grains of quinine.

An article on *Delirium Tremens* contains judicious remarks on treatment, to which we must refer the reader, merely remarking that the author is no advocate for the gradual withdrawal of stimulants, but

withholds them completely from the first. Nor does he believe the attack is ever brought on by a sudden abstraction of the accustomed He recommends opium, but in moderate doses, and never with the view of promoting sleep, warning the practitioner against the danger of large doses of the drug in this disease.

We have by no means exhausted the topics which are discussed by Dr. Claiborne; for much which we have left unnoticed we refer the reader to the book itself, with the assurance that he will find it both agreeable and instructive, although we by no means agree with the author in all his views. We notice some faults in style and also in taste, but these do not materially interfere with the value of the book.

Treatise on Diseases of the Ear. By D. B. St. John Roosa, M.D. William Wood & Co. New York: 1873.

This handsome volume, of 525 pages, furnishes the American student with a complete text-book on diseases of the ear. rangement of subject matter and the double index of subjects and authors gives it the further advantage of a book for ready reference.

Following a concise preface, in which the author sets forth the object and scope of his work, "endeavoring to give not only a comprehensive digest of the most recent European researches, but also to present with entire impartiality the views and experiences of American practitioners and writers, so far as the plan of a practical treatise would allow," there is a table of contents and a list of 101 wood-cuts. The body of the work opens with an introduction of 32 pages, consisting of an interesting sketch of the progress of otology, giving the resume of the investigations in the anatomy of the ear up to 1858, and in aural therapeutics from the time of Asclepiades to the present date; the latter resumé affords ample food for the curious, in matters of therapeutics. The second chapter gives the anatomy of the external ear, illustrated by copies from the excellent plates of Henle. Of these and engraved copies of the photographs of Rüdinger, the author has advisedly availed himself in the illustration of the anatomical portion of his work. The third chapter, of 32 pages, is devoted to the examination of aural patients, including the means for testing and recording the hearing power, the use of the speculum, mirror, the air-douche and Eustachian catheter and rhinoscopic examination. The fourth chapter treats of the functions and diseases of the auricle; and the fifth and sixth chapters, which conclude the first part of the work, comprise, in a space of sixty pages, much matter of interest to the general practitioner in the description and treatment of diffuse and circumscribed inflammation of the auditory canal, the peculiar affection lately observed as resulting from vegetable fungous growths, the diagnosis and removal of inspissated cerumen, of foreign bodies and of polypi.

The second part of the work comprises 278 pages, of which 40 pages are devoted to the anatomy of the middle ear, giving in addition to quotations and plates from Henle and Gruber, the later observations of Kessel and of Rüdinger in regard to the anatomy and func-

tions of the Eustachian tube.

Chapter X. treats of injuries of the membrana tympani, and the four succeeding chapters cover ground which is represented by from thirty to thirty-five per cent. of all cases occurring in aural practice in the form of acute and chronic non-suppurative inflammation of the middle ear; and this portion of the work is of particular value to the specialist as it is made to include the later contributions to the therapeutics of these affections, a subject which has received considerable attention during the past few years, especially from German observers. Acute and chronic suppurative inflammations of the middle ear occupy the next two chapters, following which a space of 72 pages, devoted to the consequences of the diseases, concludes part second, including the nature and treatment of aural polypi and a valuable treatise upon mastoid diseases, caries and necrosis, and a tabulated statement of forty cases, showing the course and symptoms of meningitis, cerebral abscess and pyæmia resulting from aural disease.

Part third comprises the anatomy of the internal ear, covering twenty-three pages. The diseases of the internal ear are tabulated according to their proximate and remote causes and then treated of seriatim, a method of presenting the subject which has practical advantages. In addition to wood-cuts in the text, is a colored lithographic plate of illustrative cases of disease of the membrana tympani and middle ear from drawings made by Dr. H. P. Quincy, including a normal membrana tympani and seven cases of suppurative and non-

suppurative inflammation.

The work, as a whole, is a comprehensive summary of the present knowledge of the anatomy of the ear and of the diseases and their treatment. The anatomical portion of the treatise is so distributed as to make it most readily available to the practitioner who desires a work for reference, and while concise is still sufficiently full for the instruction of the general student. The description of the diseases and their treatment is the result of the author's own observation, and, together with comparative quotations from other writers, gives the latest results of the investigations in this branch of surgery.

The work supplies a need for a good text-book, which has heretofore been met to the English speaking student by the author's translation of Von Troltsch, published nine years ago.

C. J. B.

BOOKS AND PAMPHLETS RECEIVED.

Report of the Diseases of Indiana for the year 1872. By George Sutton, M.D., of Aurora, Indiana. (From Proceedings of the State Medical Society.) Indianapolis, 1873. Pp. 33.

Nitrite of Amyl in the Treatment of Spasmodic Asthma and Acute Reposition.

Nitrite of Amyl in the Treatment of Spasmodic Asthma and Acute Bronchitis. By Daniel H. Kitchen, M.D. Re-printed from American Journal of Insanity. 1873. Pp. 8.

A Manual of Midwifery, including the Pathology of Pregnancy and the Puerperal State. By Dr. Karl Schræder. Translated into English from the Third German Edition by Charles H. Carter, B.A., M.D., B.S. London. New York: D. Appleton & Co. 1873. (From A. Williams & Co.)

Twenty-second Annual Report of the Boston Provident Association.

October, 1873. Pp. 23.
A Treatise on the Diseases of the Eye. By J. Scelberg Wells, F.R. C.S. Second American from the third English Edition, with additions. Philadelphia: Henry C. Lea. 1873. Pp. 836.

Boston Medical and Surgical Journal.

BOSTON: THURSDAY, NOVEMBER 6, 1873.

THE DEATH OF SIR HENRY HOLLAND, lately announced, has removed another of the more prominent medical men of our time. He might, however, with more propriety, be considered to belong to an earlier generation of men than those who now occupy the leading positions in his own and other countries of Europe, his great age carrying him back to times which are with most a matter of history only. He was born Oct. 27, 1788, and took his medical degree at Edinburgh in 1811. He did not, however, begin the practice of his profession until 1816, the interval being passed in travel, during a part of which time he attended the Princess of Wales in a tour on the Continent. professional career, owing partly to his social advantages and literary tastes, presented a marked difference from that of most medical men. From the very beginning, his practice was confined to the upper classes in society, and those who have read his "Recollections of Past Life," are familiar with the innumerable distinguished men and women with whom he was brought in contact. Indeed, it is to this peculiarity chiefly that his life is so full of interest. It is, in fact, a part of the history of the time. After nearly forty years of professional service, he was appointed Physician in ordinary to the Queen, and in the following year was created Baronet. His practice extended over a period of fifty years. Although a man of great literary tastes, he may be said to have contributed but little to medical literature; his Medical Notes and Reflections, which ran through several editions, being his sole work of this character. This may be explained by the fact that at no time during his career was he connected with any hospital. He wrote frequently for the Edinburgh and Quarterly reviews, and his accounts of travel have been numerous and interesting. Although an active practitioner for half a century, he found time, taken from his professional pursuits, to travel over a greater part of the globe, and to this activity may be ascribed a long life of health and usefulness. He proved to the profession that a healthful recreation is not incompatible with professional success, a fact which few men, in this country particularly, appear to realize. With him may be said to have passed away one of the last vestiges of the old school of men who ornamented London in the early part of this century.

WE are much gratified at learning of the success attendant on the Harvard Dental School. It has, in its new class, three young men from

Europe: one from England, one from Holland and one from Germany. We have long known of the fame of American dentists in Europe, but this is, we believe, the first evidence that we have received that Europe is coming to America to study at our venerable University. It has reason to do so, for our methods of practising dentistry are vastly superior to the European, and the Harvard School has taken a high stand in regard to the length of time of study and of practical work it will require of its pupils before bestowing its degrees. In doing so, it has only pursued the same course followed in the Medical School, and it has put itself in full communion with other departments of the University, as carried on by its present enlightened government. We trust that this is only the beginning of a most honorable career for the Dental School. It has our heartiest good wishes for full success.

We are indebted to a correspondent for the following statement of the attention given in Italy to the treatment and study of disease of the skin and of syphilis. Boston would do well to take example.

The universities of Florence [pop. 120,000] and of Rome [pop. 210,000] possess special professors and clinics for diseases of the skin Bologna [pop. 90,000], Naples [pop. 500,000], and for syphilis. Palermo [pop. 170,000], Turin [pop. 185,000] and others have each a professor and a clinic for these two departments combined. such places as Pavia, Padua, Genoa and Messina recognize these specialties, though compelled to unite them with one of the general clinics. Medical students of the sixth year must regularly attend these clinics, and must pass a satisfactory examination in these branches before they can receive their diplomas. According to sanitary regulations enacted since the unification of Italy, the largest cities must possess special hospitals [syphilicomia); smaller ones, special wards in their general hospitals; and cities with more than 20,000 inhabitants, at least a dispensary, for these diseases. By law, no impecunious syphilitic patient can be refused admittance.

The Mospitals.

MASSACHUSETTS GENERAL HOSPITAL.

Drs. Bigelow and Cabot commenced their service here last Saturday. A number of operations were performed. A case of hare-lip (complicated with cleft-palate) was that of a young adult who had been operated upon in infancy, and whose condition had been improved by Sucresn's artificial palate. He now wished to have the appearance of the lip improved. Before operating, Dr. B. remarked that the success of this operation depended on a

free dissection of flaps, and the removal of so much of the lip as would extirpate the notch, if possible, and make the labial edge unite in a straight line. He knew no better incision for the edges which were to be united than a straight one—the first stitch to be exactly upon the line of the labial mucous membrane of both sides, the second through the nostrils, with such

subsequent and intervening ones as might be required.

A necrosis was of eight years' standing, and had followed an attack of scarlet fever. It was peripheral in character and located in the tibia. The periosteum had become much thickened, and was closely adherent to the skin for an area of one inch by five, with the loose bone as a centre. An incision of five inches was made in the axis of the tibia, down to the bone, the soft tissues scraped each way from the line of incision and the loose fragments removed. The softened bone which had made the bed of the sequestrum was then chiselled and gouged off by Dr. Cabot. He next excised a tumor of the neck, of nine years' duration, and about the size of a horse-chestnut. It had followed an attack of mumps, and was located in the superior carotid triangle, underneath the anterior edge of the sterno-cleido-mastoid muscle. An incision was made through the skin, and after a careful dissection through the fascia, the tumor was displayed attached to the pos-terior portion of the carotid sheath by a narrow pedicle; this was tied and the growth cut off, after which the vessels were tied and the wound sewed

the grown cut on, and the supra-orbital region, adperent to the periosteum, and also exhibited a boy ten years old with a fracture of the surgical neck of the humerus, caused by a fall from a tree three weeks before. Union had taken place during this brief period, but with deformity, resulting from the considerable projection of the shaft in front of the head of the bone. The patient had entered on account of the deformity, but his motion was good. Dr. B. advised against re-fracture.

H. H. A. BEACH.

H. H. A. BEACH.

Correspondence.

DOWN EAST, Oct. 25th, 1873.

Messrs. Editors,—The information received by me concerning electricity was of great service, I assure you. Speaking of this subject to one of our craft, who lives less than a hundred miles from you, he gave me a little of his personal experience with electricity, which has been of very great use to my patients. He had seen the advertisement of electrical disks, and the my patients. He had seen the advertisement of electrical disks, and the recommendation of them in print by Boston physicians, even professors, and yet hadn't faith. By the way, why will medical professors allow their names to be used on quack medicine bottles? Some one who had them for sale said, "You laugh at this small battery. Did you ever try it?" "No." "That's enough; your opinion is of no consequence." Well, he thought differently; but for the sake of being able to say that he had tried it, he bought one, and had the salesman tuck it under his undershirt, upon his chest, before leaving the store. He went home to dinner. Before he got through there was ever irritation then a recover pleater would produce. So chest, before leaving the store. He went home to dinner. Before he got through, there was more irritation than a porous plaster would produce. So he rubbed it between whiles, and passed the afternoon visiting patients and rubbing his sternum. Towards the close of the evening, a brother practicioner called, to whom he acknowledged that he had on a disk; that it produced great irritation; that he believed it would blister; wished his friend would look at the spot, and see the reason for his believing a disk would produce counter-irritation, &c. The clothing was raised. The disk was there. The skin was red. The most remarkable part of the tale was, however, that he'd got the disk on wrong side out, the enamelled cloth being next to the skin, and the disk against his shirt. Now, see how this has been of use to my patients. You know, once, that they didn't know how to operate a telegraph without two wires; but they found that the earth would answer for one of the wires, and so left one off. It seemed to me that if one wire could be left out of that circuit, as the battery is not very powerful in this circuit, perhaps the battery could be left out. The enamelled cloth is quite cheap, and I thought the gentle irritation produced by it might be of service to some patient, who couldn't bear anything very strong, and thought he needed a plaster. You can buy a yard of it, and keep it on hand in sizes to suit purchasers. There are two or three colors, and, if you want to quack it a little, you can use the red for this complaint, the green for that, the black for something else. You can combine two of the colors in stripes, or

three of them, if you please; or, in other cases, you can make radii of them. If you want a name, I would suggest the "Pleurodynia Plaster."

There are a number of little contrivances for producing cutaneous irritation. Cabbage leaf will do it; dock leaf will do it; but none of them are tion. Cabbage leaf will do it; dock leaf will do it; but none of them are equal to enamelled cloth, for cleanliness. They are dirty and smell bad. One who is walking or riding about don't like to wear mustard. I remember, when I was very young, they used to raise blisters with boiled hammers. Old Dr. Twitchell, of Keene—peace to his ashes—once wanted to blister some one in a farm house, far from home. He had nothing with him to do it with. He asked the wife to find him a hammer. The article was brought out, put in the tea-kettle over the fire, and after the water steamed and bubbled well, he lifted it out and gently touched it to his patient in half a dozen spots over the seat of pain, with very positive effect. Boiled hammers were, for years, used in that neighborhood for pleurisy; and every old lady knew that nothing was equal to a hammer: and there was long a dispute, knew that nothing was equal to a hammer: and there was long a dispute. where that nothing was equal to a hammer; and there was long a dispute, whether it should be a claw-hammer or not. I think the yeas finally conquered.

Yours truly,

RUSTICUS.

MESSRS. EDITORS,-The following history of nightmare, night terrors, or whatsoever name it may be designated by, is a physician-patient's description of his own case. Always, from earliest childhood, the victim of bad dreams, an inheritance shared with brothers and sisters, he knew well how to pity children who, by mistaken parents, are made cowards, in trying to learn them to be brave and conceal their fears. The record was made on the day after the dream, and while the impression was very vivid.

"I had barely recovered from an attack of acute rheumatism.

"Sunday, April 30th, 1848.—After a moderate dinner of beefsteak, bread and "Sunday, April 30th, 1848.—After a moderate dinner of beefsteak, bread and potatoes, with part of a glass of ale, smoked a cigar, and, feeling tired, threw myself on the bed with a book, and, after reading about ten minutes, fell asleep. Waked by bell. Went to office, returned and again fell asleep. Between this time and 2½ o'clock, had oppression of breathing, and waked four times with sense of suffocation. On three of these occasions, was wakened by my wife on account of dyspnea. Twice, the dyspnea was accompanied by dreams, not in themselves frightful, nor do I know if I breathed hurriedly on waking. Was very drowsy, and, though afraid to sleep, did not feel energy enough to rouse myself sufficiently to get out of bed.

"May 1st .- Do not remember anything out of the ordinary course. Dined

any ist.—Do not remember anything out of the construction of boiled fish. No extra fatigue. Quiet night.

"May 2d.—No extra work. Nothing unusual in the way of food, except that being out in the evening, was hungry, and took a bit of sponge cake with a glass of wine, and at 10.20 went to bed. Slept quite soon.

"The waking was attended with the following experience: I waked with a wall. The waking was attended with the following experience: I waked with a wall."

yell. The room was perfectly dark; but a male figure, darker than the darkness, and dressed in black, was standing by the bedside. Why I screamed, I do not know. I attempted to reach the object with my feet, and, as I kicked, it gradually receded towards the door of the room, vanishing at the case of the standard of the room, which is the control of the room of the room. at the same time. By the time the door was reached, it was so faint as to

be hardly perceptible. My wife, wakened by my scream, raised and rubbed me, calling me by name. It seemed to me as if I were awake long before me, calling me by name. It seemed to me as if I were awake long before the yell ceased, and before the object disappeared. How long the vision lasted, I have not the slightest idea. Did not think to feel pulse, till I had been out of bed and returned. Found myself exhausted, and breathing rapidly, as if after violent exertion. Sensation of pain about fifth rib on left side, and intercostal space below, dull and not relieved by any change of posture. Pain not severe. If I recollect aright, the heart beat very hard. Feeling of exhaustion very great. Great drowsiness. Could not easily persuade myself of the unreality of the apparition, but would not go into next room to see. Determined to overcome fears. Was much surprised to find that it was only 114, P.M. Pain continued till I fell asleep. Left lamp burning. Forgot, till after I returned to bed, to feel pulse, which was rapid and very feeble, compared to heart's impulse. and very feeble, compared to heart's impulse.

"This is the fifth or sixth time that this same figure has appeared. Its face, I cannot describe. It is indistinct. But I fancy the figure standing with folded arms or folded hands by the bedside, and staring in my face with a sorrowful look. Twice, I remember to have hurt my hand with the blow, which I struck at it, reaching towards it as it receded, the hand striking a chair. On one occasion, I fell from the bed, in the attempt to reach it. Only once before have I given such a yell upon waking. It was just a

year ago, when recovering from an acute inflammation of the tonsils.

"Whenever I fairly wake after this appearance, I have not the courage to

whenever I fairly was after this appearance, I have not the courage to go to sleep again, that night, in the dark; and sometimes have searched the room first. Last night, I would not yield to the inclination.

"When I waked on Sunday, I called 'Henry' twice, and once 'Francis.' I am told that I generally call 'Henry,' and on several occasions followed it with 'Ellen.' In former times, was more subject to the Sunday trouble

with Ellen. In former times, was more subject to the Sanday trouble than of late. Have had it only four or five times in seven months.

"May 3d.—Did not wake again, till 6½ A.M. Felt very sleepy, but in other respects as well as usual. At dinner time, appetite poor. At 5½ P.M., very slight uneasiness, cannot call it pain, in left breast, over same spot as last night. Pulse 72. No dyspnea."

This record was made, as is stated, immediately after the occurrence, with

the intention of comparing it with any repetition of the same. On looking it over, the writer can only say that, from that date, over twenty-five years, it has never been repeated. The peculiar affection of Sunday afternoon has frequently occurred. He questions now, whether the night scene, which made so strange an impression, might not have been the first and only appearance. Perhaps some observer of psychological phenomena may be interested in the recital.

MESSRS. EDITORS,-Dr. Chenery says of his case of delirium tremens, related in the last number of the JOURNAL: "This was not a case caused by leaving off his cups, but the direct effect of their excessive use." Query.— Who ever saw a case that was not so caused?

I certainly never did. I have seen men on the brink of the disease "leave off their cups," and go and have it; they would have had it, with or without their potations. JAS. O. WHITNEY.

Pawtucket, R. I., Oct. 22, 1873.

MESSRS. EDITORS,—When examining recruits for the U. S. Marine Corps, last autumn, I met with the following anomalies. Seth W. Buffum had an extra nipple, perfectly formed, with arcola, hair folliels, &c., about half the size of a normal one. It was situated three inches directly below the right nipple.

In two other recruits, the nipples were bifurcated. EDW J. FORSTER, M.D. 2 Dexter Row, Charlestown, Oct. 17, 1873.

Medical Miscellann.

M. Nelaton is said to have died worth over £280,000, of which his wife brought him £80,000.

THERE were 514 deaths in New York for the week ending Oct. 18th, of which 23 were by violence.

The beer and ale drinkers expand and grow fat, but they are not much given to profound researches in science.—Med. & Surg. Reporter.

Like the Germans we suppose.

We are sorry to learn that Brown-Séquard's Archives will end with the first volume. The receipts have not been sufficient to meet the heavy expenses. The Archives has contained many valuable papers, and will not be forgotten.

SUPPRESSED DEATH FROM CHLOROFORM.—So far as we know, no case of death from chloroform occurring in this city has been recorded; yet we have known of the occurrence of several within a comparatively short time.—
Philadelphia Medical Times.

ANY one who visits Chilwald, England, can read in the cemetery the following epitaph:

"Here lies me and my three daughters,

Brought here by using Siedlitz waters. If we had stuck to Epsom salts,

We wouldn't have been in these here vaults."

-Med. & Surg. Reporter.

THE following is a statement of the prevalence of, and mortality from, cholera in Russia during the five years, 1867-71:—

1867	-		Cases. 33,382	Deaths. 13,609
1868			83	35
1869			911	510
1870			20,140	9,446
1871			305,929	116,981

Case of Wound of the Abdomen, with Protrusion of the tomentum: Recovery.—C. T., aged 16, was getting over a gate, on the top of which were several iron spikes, when his foot slipped, and he fell on the top of one of them. He did not feel much pain or inconvenience at the time, but shortly afterwards became sick and faint; but on recovering, he walked home, a distance of about thirty yards, and, as he then felt well, he did not mention the accident, nor did he examine himself to see if he were injured. He remained up until about ten o'clock, when, on undressing, he discovered, he says, "that his bowels were coming out." About an hour after this, my partner, Mr. Prideaux, saw him, and found, in the left inguinal region, a wound about an inch in length, through which was protruding a piece of omentum, about the size of an egg, the neck of which was rather tightly constricted. The omentum, not being gangrenous, was speedily replaced by relaxing the abdominal muscles, and employing steady pressure. The wound was then closed by a suture or two, and a compress and bandage applied. He passed a good night, and in the morning seemed in good spirits, having no pain, nor was there any tenderness over the abdomen. He was kept perfectly quiet in bed and on low diet for a fortnight, at the end of which time the wound had perfectly healed, and he was allowed to sit out of bed on a couch. Three days afterwards, he came down stairs, and on the next day I met him in the road, seeming perfectly well.—British Med. Jour.

THE medical testimony in the Stokes trial presented the usual edifying spectacle of the evidence of men of various degrees of skill and respectability put on a perfect equality before a jury, to whom, out of flattery, we will ascribe ordinary intelligence, but who could not be expected to know which of the contradicting experts was to be believed.

VESICO-VAGINAL FISTULA COMPLICATED WITH CALCULUS.—Dr. Alves Branco relates, in the Correio Medico de Lisboa for July 1st, the case of a woman aged 25, who came under his care in the S. José Hospital on account of vesico-vaginal fistula, the result of injury in her first labor four months previously. The opening, which would, when first formed, admit the index and middle fingers, became reduced in diameter in four months to a centimeter (.39). She now complained of severe pain in the hypogastrium; and a month afterwards, of heat and pain in the bladder, aggravated by the act of micturition. On passing a sound through the fistula, a calculus was deon institution. On passing a sound through the fistula, a calculus was detected. Dr. Branco made two attempts, with the interval of a week, to perform lithotrity; but failed in consequence of the impossibility of keeping the bladder full of water, and the extreme irritability of the organ. He therefore enlarged the fistulous opening on both sides by means of a probepointed bistoury, and removed a calculus as large as a nut. A month later, he united the edges of the fistula by silver wire sutures. The patient was discharged cured .- Ibid.

NOTES AND QUERIES.

WE have received several answers to the query of X. P. Q. on counter-irritation; among these are mentioned acetic acid and chloroform. A cloth wet with either of these, when laid upon the skin and held there for a few minutes beneath a sheet of paper, answers the purpose well. We do not see that ammonia would be open to the objection stated. The tincture of the grains of paradise has also been recommended.

In answer to the "Inquirer" in your number of Oct. 16th, we are able to say that we have used Plantin's castor oil capsule for the last ten years, the result of which experience is that a single one is equal in effect to the ordinary one-half to one-ounce dose of oil for adults, and also that they are not suitable for children or delicate females, on account of their harshness. We know nothing of their "make up," but have always thought they contained croton oil, from the activity of so small a dose, and have governed ourselves accordingly. They are fit for adults alone, and their only advantage is their want of taste. We use them, quite often, to move the bowels, when necessary, the first time after delivery, in strong, or moderately strong women.
"Castoria" is found, on examination

"Castoria" is found, on examination, to consist principally of senna, with some other cathartic and stomachic medicine in its "make up"; at least so says the Druggists' Circular, if I am not mistaken. DOCTOR.

MORTALITY IN MASSACHUSETTS. - Deaths in fifteen Cities and Towns for the week ending October 25, 1873.

Boston, 120—Charlestown, 13—Worcester, 18—Lowell, 20—Milford, 5—Chelsea, 6—Cambridge, 20—Salem, 7—Springfield, 10—Lynn, 17—Fitchburg, 5—Taunton, 5—Newbury-port, 6—Somerville, 8—Fall River, 23. Total, 283.

Prevalent Diseases.—Consumption, 33—pneumonia, 21—cholera infantum, 19—scarlet

fever, 16-typhoid fever, 18.

GEORGE DERBY, M.D., Secretary of the State Board of Health.

Deaths in Boston for the week ending Saturday, Nov. 1st, 111. Males, 48; females, 68. Accident, 3—abscess, 1—apoplexy, 2—asthma, 1—amemia, 1—disease of the bladder, 1—bronchitis, 4—indiammation of the brain, 1—disease of the brain, 3—cancer, 1—cholera infantum, 3—consumption, 24—convulsions, 3—debility, 4—diarrhea, 5—dropsy, 1—dropsy of the brain, 2—drowned, 1—diphtheria, 2—erysipelas, 2—scarlet fever, 7—typhoid fever, 11—disease of the; 1—disease of the interval, 4—interperance, 1—disease of the kidneys, 2—disease of the liver, 5—inflammation of the lungs, 4—marasmus, 3—old age, 2—peritonitis, 1—puerperal disease, 2—enlarged prostate, 1—pyæmia, 1—suicide, 2—teething, 1—tumor, 1—whooping cough, 1.

Under 5 years of age, 36—between 5 and 20 years, 11—between 20 and 40 years, 29—between 40 and 60 years, 19—over 60 years, 16. Born in the United States, 70—ireland, 24—other places, 17.